

CLAIMS

1. A method for regulating the vacuum supply of calibration tools (4a, 4b; 5a, 5b), said tools comprising at least one dry calibration tool (4a, 4b) and at least one calibration bath (5a, 5b), by which at least one vacuum pump (17a, 17b, 17c, 17d) is brought into contact with a calibration tool (4a, 4b; 5a, 5b), in order to draw air from the calibration tool (4a, 4b; 5a, 5b), the pressure in said calibration tool (4a, 4b; 5a, 5b) being regulated to a target value by means of a control valve (13, 15), wherein a plurality of vacuum pumps (17a, 17b, 17c, 17d) draw air from a common pressure tank (16) and characterized in that the air is drawn from at least one dry calibration tool (4a, 4b) through a first control valve (13) into the common pressure tank (16) and wherein further the air is drawn from at least one calibration bath (5a, 5b) through a second control valve (15) into the common pressure tank (16).
2. The method according to claim 1, characterized in that the air is drawn from the dry calibration tool (4a, 4b) through a first water separator (9) mounted upstream of the first control valve (13).
3. The method according to claim 1 or 2, characterized in that the air is drawn from the calibration bath (5a, 5b) through a second water separator (11) mounted upstream of the second control valve (15).
4. The method according to claim 1 through 3, characterized in that a plurality of vacuum pumps (17a, 17b, 17c, 17d) are connected to the common pressure tank (16) and wherein pressure regulation in the common pressure tank (16) is performed by respectively switching discrete vacuum pumps (17a, 17b, 17c, 17d) on and off.
5. The method according to claim 4, characterized in that pressure regulation in the common pressure tank (16) starts from a target value that either corresponds to the minimum value of the pressure to be set in the discrete calibration tools (4a, 4b; 5a, 5b), or slightly falls below said minimum value.

6. A device for regulating the vacuum supply of calibration tools (4a, 4b; 5a, 5b), said device including at least one dry calibration tool (4a, 4b) and at least one calibration bath (5a, 5b), with at least one vacuum pump (17a, 17b, 17c, 17d) and with at least one control valve (13, 15), characterized in that there is provided a common pressure tank (16) that is connected to at least one dry calibration tool (4a, 4b) through a first control valve (13) and that is connected to at least one calibration bath (5a, 5b) through a second control valve (15).
7. The device according to claim 6, characterized in that a first water separator (9) is provided upstream of the first control valve (13).
8. The device according to claim 6 or 7, characterized in that a second water separator (11) is provided upstream of the second control valve (15).
9. The device according to any of the claims 6 through 8, characterized in that a plurality of vacuum pumps (17a, 17b, 17c, 17d) are mounted in parallel with the common pressure tank (16).
10. The device according to claim 9, characterized in that there is provided a control system (19) that regulates the pressure in the common pressure tank (16) by switching discrete vacuum pumps (17a, 17b, 17c, 17d) on and off.
11. The device according to any of the claims 6 through 10, characterized in that on the air side the dry calibration tool (4a, 4b) communicates with the common pressure tank (16) only.
12. The device according to any of the claims 6 through 11, characterized in that on the air side the calibration bath (5a, 5b) communicates with the common pressure tank (16) only.

13. The device according to any of the claims 6 through 12, characterized in that the common pressure tank (16) comprises at least one volume that corresponds to the nominal pump capacity of all of the vacuum pumps (17a, 17b, 17c, 17d) of one to five seconds at the pressure target value of the common pressure tank (16).
14. The device according to any of the claims 6 through 13, characterized in that there are provided between three and five vacuum pumps (17a, 17b, 17c, 17d).